

Notice of Allowability	Application No.	Applicant(s)	
	10/649,586	BUI, HUY A.	
	Examiner	Art Unit	
	Bernard E. Souw	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt 11/14/2005.
2. ☒ The allowed claim(s) is/are 1-18 and 20-52.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|--|--|

DETAILED ACTION

Amendment

1. The Amendment filed 11/14/2005 has been entered. The present Office Action is made with all the arguments being fully considered.

Claim 19 has been previously cancelled.

New claims 47-52 have been added

Claims 1-18 and 20-52 are pending in this office action.

Previous Amendment

2. The previous Amendment filed 07/14/2004 has been entered.

The Title has been amended.

Claim 19 has been canceled.

ALLOWANCE

3. Claims 1-18 and 20-52 are allowed.

The claims are subsequently renumbered to claims 1-51.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

A method of calibrating an ion source for use in a mass spectrometer system, the ion source including a sample control system including a sample holder for supporting a

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sample plate in a sample plane and a laser source having a focal point representing a point at which a beam generated by the laser source intersects the sample plane, the method comprising: mounting a sample plate in the sample holder, the sample plate including one or more fiducials defining reference points of a sample plate coordinate system and one or more target regions at one or more predefined locations in the sample plate coordinate system; determining a relationship between the coordinate system of the sample plate and a coordinate system of the sample control system, the relationship being determined by aligning one or more fiducials relative to a reference point of the sample control system using computer-implemented pattern recognition techniques; and using the determined relationship to align one of the target region of the sample plate with ion optics of a mass spectrometer for a mass spectrometric analysis, as recited in claims 1 and 10, is neither anticipated nor rendered obvious by any prior art.

Claims 20 and 29 are also allowed for claiming a computer program product that is produced by the method as defined in claims 1 or 10.

Claim 38 is also allowed for claiming a mass spectrometry system that makes use of the method as defined in claims 1 or 10.

Claim 43 is also allowed for claiming a method for generating ions for use in a mass spectrometry system that makes use of the method as defined in claims 1 or 10.

Claims 2-9, 11-18, 21-28, 30-37 and 39-43 are also allowed because of its/their dependencies, either directly or indirectly, upon claims 1, 10, 20, 29, 38 or 43.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Relevant Prior Art

6. This prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(a) USPAT 6,804,410 issued to Lennon et al. discloses a method for aligning a laser beam to the sample spots on a sample plate in a MALDI mass spectrometer system using image processing technique, which may well include pattern recognition technique. However, Lennon's method does not make use of fiducial markings on the sample plate and correlate them to those on the sample holder.

(b) USPAT 6,804,410 issued to Schamber et al. discloses a pattern recognition technique based on correlation for aligning fiducial markings on an image to those on its holder. However, Schamber's technique is not applied to a sample plate and/or MALDI.

Communications

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272

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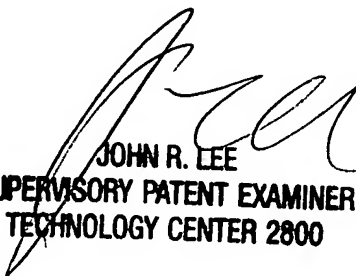
2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone number for the organization where this application or proceeding is assigned is 571 273 8300 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 5993.

bes

February 04, 2006


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800